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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/856,440	06/12/2001	Jaakko Rajaniemi	4925-115 PUS	8145

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EXAMINER

CONTEE, JOY KIMBERLY

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 12/22/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/856,440

Applicant(s)

RAJANIEMI, JAAKKO

Examiner

Joy K Contee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by LeBlanc et al. (LeBlanc), WO 98/10538.

Regarding claim 1, LeBlanc discloses a method for location management in a cellular telecommunication system supporting macro diversity connections, characterized in that, regarding a macro diversity situation it comprises the steps of:

assigning priority levels to the cells of an active set of a macro diversity connection (page 27, lines 24-31) , and

at least partly based on the priority levels, determining a cell to be used as the location of the mobile station (page 37, lines 15-18).

Regarding claim 2 , LeBlanc discloses a method according to claim 1, characterized in that each of the cells used in a macro diversity connection between

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a mobile station and the network is classified as being in a serving cell set or outside said serving cell set (page .

Regarding claim 3, LeBlanc discloses a method according to claim 2, characterized in that one of the cells in the serving cell set is selected to be a master cell (page 22,lines 13-16 and page 57, lines 19-20).

Regarding claim 4, LeBlanc discloses a method according to claim 3, characterized in that said selection is performed by the network (page 43,lines 21-25 and page 57, lines 18-20) .

Regarding claim 5, LeBlanc discloses a method according to claim 4, characterized in that the network performs the selection of the master cell as a response to a message received from the mobile station, which message does not contain an indication of a master cell (page 22,lines 13-16 and page 57, lines 19-20).

Regarding claim 6, LeBlanc discloses a method according to claim 3, characterized in that said selection is performed according to a predefined rule (page 13lines 18-21 and page 27, lines 24-31 and page 57, lines 18-20).

Regarding claim 7, LeBlanc discloses a method according to claim 6, characterized in that the cell of the serving cell set which has been in the active set for the longest time is selected to be the master cell.

Regarding claim 8, LeBlanc discloses a method according to claim 3, characterized in that said selection is performed by the mobile station network (page 43,lines 21-25 and page 57, lines 18-20) .

Regarding claim 9, LeBlanc discloses a method according to claim 8, characterized in that the cell selected by the mobile station is indicated to the network in a message sent by the mobile station (page 22, lines 13-16).

Regarding claim 10, LeBlanc discloses a method according to claim 8, characterized in that - the mobile station requests location information from the network, - the mobile station receives a response to the request from the network, and the selection of the master cell is performed at least partly based on said response (page 23, lines 24-27 and page 29 lines 29-32).

Regarding claim 11, LeBlanc discloses a method according to claim 8, characterized in that said selection is performed at least partly on the basis of information about localized services of the network stored in the mobile station. 10 12. A method according to claim 1, characterized in that the priority levels of the cells in the active set are changed as a response to serving RNC relocation (page 67, lines 14-17).

Regarding claim 13, LeBlanc discloses a method according to claim 2, characterized in that as a response to serving RNC relocation, the cells of the active set which were designated as being in the serving cell set are designated as being outside the serving cell set, and the cells of the active set which were designated as being outside the serving cell set are designated as being in the serving cell set (page 19, lines 14-31).

Regarding claim 14, LeBlanc discloses a method according to claim 2, characterized in that the mobile station designates those cells of the active set as being in the serving cell set, which cells are listed in a message received from the network

informing the mobile station about a serving RNC relocation, and designates other cells of the active set as being outside the serving cell set (page 71, lines 5-14).

Regarding claim 15, LeBlanc discloses a method according to claim 2 used in a cellular telecommunication system comprising a first network element for controlling circuit switched connections and a second network element for controlling packet switched connections, characterized in that when a mobile station has an active connection to a first of the first and second network elements and no active connections to a second of the first and second network elements, a location update to said second of the first and second network elements is performed at least partly as a response to a change in said serving cell set (page 71, lines 5-14).

Regarding claim 16, LeBlanc discloses a method according to claim 15, characterized in that said location update is performed at least partly as a response to the changing of all cells in the serving cell set (page 57, lines 19-20).

Regarding claim 17, LeBlanc discloses a method according to claim 15, characterized in that said location inherently updates are performed at least partly as a response to removing of the last of those cells in the serving cell set, which cells were in the serving cell set when a location update was performed the previous time (page 22, lines 13-16 and page 57, lines 19-20).

Regarding claim 18, LeBlanc discloses a method according to claim 15, characterized in that the method comprises steps, in which - the mobile station requests location information from the network, - the mobile station receives a response to the request from the network, and - the mobile station makes a decision about whether or

not to perform a location update to said second of the first and second network elements at least partly based on said response (page 23, lines 24-27 and page 29 lines 29-32).

Regarding claim 19, LeBlanc discloses a method according to claim 2 used in a cellular telecommunication system comprising a first network element for controlling circuit switched connections and a second network element for controlling packet switched connections, characterized in that when a mobile station has an active connection to a first of the first and second network elements and no active connections to a second of the first and second network elements, a location update to said first of the first and second network elements is performed at least partly as a response to a change in said serving cell set (page 71, lines 5-14).

Regarding claim 20, LeBlanc discloses a mobile station for a cellular telecommunication system comprising a cellular network, which mobile station has means for communicating using macro diversity connections in which the mobile station communicates with the cellular network via a plurality of cells, said means for communicating comprising receiving means, characterized in that

the receiving means are arranged to receive information for construction of a priority order for the plurality of cells with which the mobile station communicates in a macro diversity connection (page 27, lines 24-31 and page 28, lines 17-21), and

the mobile station comprises selecting means that are arranged to select a master cell to be used as the location of the mobile station at least partly on the basis of said priority order (page 22, lines 13-16 and page 57, lines 19-20).

Regarding claim 21, LeBlanc discloses a mobile station according to claim 20, characterized in that the mobile station further comprises means for indicating the selected master cell to the network (page 24l ines 19-21 and page 24, lines 28-31).

Regarding claim 22, LeBlanc discloses a system for location management in a cellular telecommunication system characterized in that

the system is arranged to transmit to a mobile station information for construction of a priority order for the plurality of cells with which said mobile station communicates in a macro diversity connection (page 11, lines 21-26 and page 22, lines 1-8 and page 27, lines 24-31 and page 28, lines 17-21), and

the system is arranged to receive from a mobile station, after having transmitted to said mobile station information for construction of a priority order for the plurality of cells with which said mobile station communicates in a macro diversity connection (page 22, lines 13-16 and page 57, lines 18-20),

information specifying a master cell and to indicate the specified cell as the location of the mobile station to a core network of the cellular telecommunication system (page 24, lines 19-21 and page 24, lines 28-31).

Regarding claim 23, LeBlanc discloses a system according to claim 22, characterized in that the system is located in a radio access network of the cellular telecommunication system (see Fig. 2, page 20, lines 11-22).

Regarding claim 24, LeBlanc discloses a system according to claim 23, characterized in that the system is located in the radio network controller of said radio access network (see Fig. 2, page 20,lines 11-22).

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Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Einola et al., U.S. Patent No. 6,438,370, discloses a location update method and intercore network entity handover method.

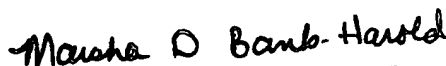
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K Contee whose telephone number is 703-308-0149. The examiner can normally be reached on 5:30 a.m. to 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.


Joy Contee

December 13, 2003


MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
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